

S4 Table. Summary of molecular and isotopic criteria to distinguish among animal and plant fats associated with archaeological artifacts and soils [10, 35, 38, 53, 55, 80-88].

<i>Dietary Resource</i>		<i>Ruminant Adipose</i>	<i>Milk</i>	<i>Dairy Product</i>	<i>Aquatic Resource</i>	<i>Plants</i>
<i>Saturated Fatty Acids (FAs)^a</i>	C_{15:0}	– ^d	+	+	-	+
	C_{16:0}	++ ^e	+++	+++	+++	++
	C_{17:0}	<i>var.</i> ^f	+	+	+	+
	C_{18:0}	+++ ^g	++	++	++	++
	C_{19:0}	-	+	+	-	+
<i>FA Ratios</i>	C_{16:0}/C_{15:0}	-	> 1.0	> 1.0	-	<i>var.</i>
	C_{16:0}/C_{18:0}	< 1.0	> 1.0	> 1.0	<i>var.</i>	<i>var.</i>
<i>Isoprenoid FAs^b</i>	C_{19:0br}	+ ^h	-	-	++	-
	C_{20:0br}	+	++	++	+	-
<i>Alkylphenyl FAs</i>	C_{18:3}	-	-	-	++	-
	C_{20:3}	-	-	-	++	-
$\Delta^{13}\text{C}_{16:0 - 18:0}$		> 3.3	< 3.3	<i>var.</i>	> 3.3	<i>var.</i>
<i>Acyl Carbon</i>	TAG^c	44-52	40-54	40-54	-	-

^a Major fatty acid (*n*-alkanoic acid) homologues are shown according to chain-length and number of unsaturations; ^b C_{19:0br} indicates 2,6,10,14-tetramethylpentadecanoic (pristanic) acid; C_{20:0br} indicates 3,7,11,15-tetramethylhexadecanoic (phytanic) acid; ^c TAG indicates *triacylglycerol* and are shown according to acyl chain-length ranges; ^d Not present; ^e Intermediate relative abundance; ^f Variable abundance; ^g High relative abundance; ^h Low relative abundance.